

The Art of High-Cost

By David Jacoby and Bruna Figueiredo

Faced with intense price pressure, structurally high labor costs, and a shrinking share of their own national markets and of worldwide production, it might appear that Western manufacturers have no path to profitable growth. But, in fact, they do. Western manufacturers can—and should—carve out a defensible and profitable position built on value-added services, proprietary engineering technology, premium pricing, and offshoring of non-core activities. It's an approach we call "high-cost country sourcing" (HCCS).

That's a key conclusion of Boston Logistics' fifth annual State of Supply Chain study. This recently completed research was based on an in-depth survey of approximately 100 manufacturers and operations management experts worldwide. Follow-up interviews were conducted with 30 of these respondents. The study was global in nature, befitting from the perspectives of corporate decision makers in North America and other developed nations such as Germany, Switzerland, Sweden and England as well as emerging economies including China, Taiwan, Brazil, Russia, Lithuania, and Saudi Arabia.

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Photos by Geoge Diebold

Can Western manufacturers survive and achieve profitable growth in a global environment that still overwhelmingly favors the low-cost producer? New research suggests that they can—through a strategy that emphasizes high-level service, advanced technology, and premium quality. This is the essence of what's called high-cost country sourcing.

Country Sourcing

In this article, we review key findings of the research in the context of today's global operating environment. In particular, we examine the sourcing challenges facing Western manufacturers and present one option—high-cost country sourcing—that may help these companies survive and prosper going forward.

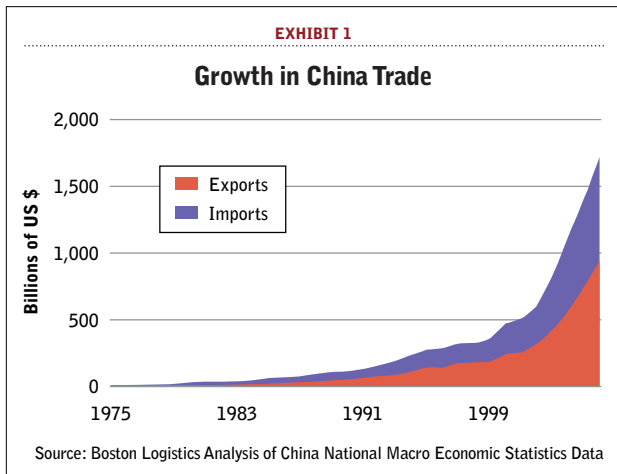
Offshoring Now Standard Practice

Our research findings confirm that offshoring—the act of moving production or services activities from your home country to another country—has today become a standard way of doing business in global companies. Over 87 percent of our survey respondents said that they outsource some activities, and most of this outsourcing activity is off-shored. Over 85 percent of respondents said they off-shore some activities, with 46 percent reporting that over one fifth of their company's unit volume is off-shored. Even activities such as food processing are being off-shored to low-cost countries by companies such as Hershey's and Nestle.

Offshoring is not a new phenomenon; it has been going on for years. China provides the most visible example. The country's exports, which had been very low and stable until about 1990, rose dramatically starting in about 1991. The growth accelerated between 1990 and 2005, spiking shortly after China joined the World Trade Organization in 2001. (See Exhibit 1.)

Pioneer entrepreneurs sourced from China and set up entire business models based on foreign sourcing. Their primary focus was on the American and European distribution chan-

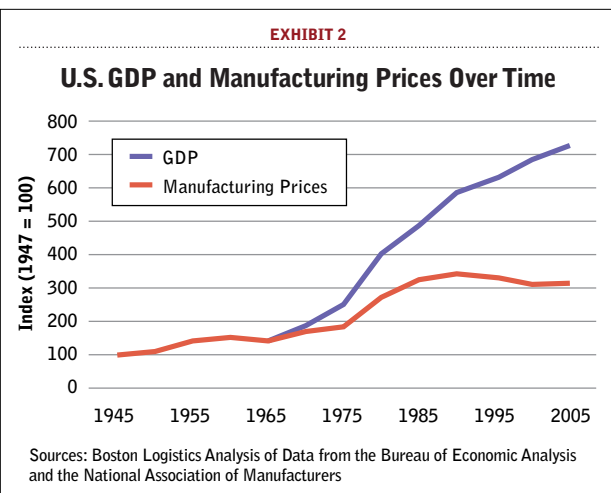




nels. This pattern was repeated in a variety of industries, from retail toys to industrial parts distribution—whatever could benefit from the low cost competitive advantage of China compared to domestic manufacturing.

In the United States alone, the value of offshore arrangements has increased steadily. Although the number of new deals has decreased significantly in the last two years, the cumulative value of outsourcing contracts has risen from less than \$50 billion in 2002 to more than \$225 billion in 2007. Between 1950 and 2005, the United States manufacturing environment sent millions abroad as the country’s manufacturing percent of GDP dropped by half. Most of that was the result of off-shore contracts.

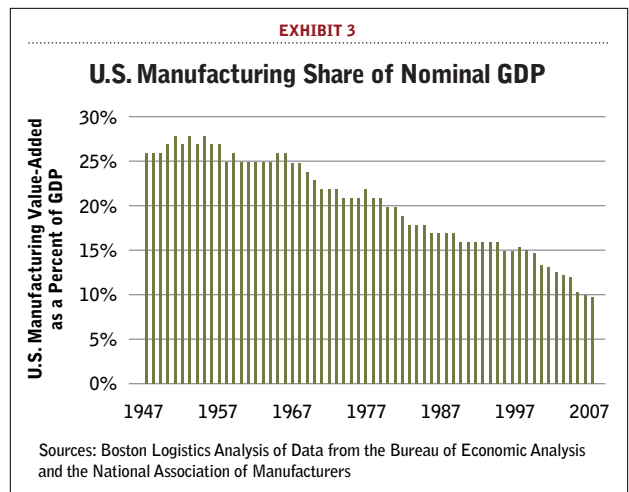
Western manufacturers have been surviving in this environment mostly through productivity growth and squeezed margins. Competitive pressure has led to higher productivity through a substitution of high-cost labor with lower-cost capital. Since 1995, non-farm productivity increased by 2.9 percent per year, according to



National Association of Manufacturers. U.S. manufacturing productivity rose by more than 50% percent over the past decade.¹

Faced with unprecedented competitive pressure, prices of U.S. manufactured goods are falling in real terms. Since 1995, prices for manufactured goods have declined 9 percent while non-manufacturing prices rose by 22 percent, according to a report by the association. (See Exhibit 2.) The strongest increases were in health-care, education, and construction where output is high and relatively constant, but price competition is fierce.

Most of the Western manufacturing being substituted by low-cost country sources has been traditional make-to-stock repetitive production. The majority of these products are at the “maturity” stage of their product lifecycles; their manufacturing approach is usually repetitive and easy to copy, and their technology is often limited. While nearly half of all manufacturers currently make to stock, 35 percent will migrate to more flexible make-to-order methods for higher-value items between now and 2035. According to an operations management professor at Babson College who participated in our research, “this type of manufacturing will never come back. We [US] will never make shoes again.” (Exhibit 3 charts the steady decline of manufacturing value-added in the U.S. since the end of World War II.)



Though the shoe manufacturing ...prediction will likely prove true,... it’s also true that the cost advantages of low-cost country sourcing could decrease, especially for U.S.-based firms. Some of the “swing variables” that could further reduce China’s advantage as a low-cost country source include:

- Chinese labor cost inflation.
- Devaluation of the U.S. dollar.
- Increasing shipping costs.

- Growth of dual sourcing arrangements.
- Environmental regulations.

However, the current cost differential between Western manufacturers and China is so large that it would take an extraordinary confluence of economic circumstances to erase all of the advantages of offshoring to that country. Even in large cities such as Beijing with high-labor costs after a year of 19-percent wage inflation, Chinese labor is still 90 percent less expensive than American labor. Furthermore, the Yuan has devalued by 38 percent against the Euro since 2000, making offshoring even more attractive to Europeans today than it was eight years ago.

Thus, even after massive restructuring, Western manufacturers find themselves struggling to keep up with less expensive Asian imports. The trend is affecting manufacturers of many types, and will not fade away. If anything, developing nations are becoming more competitive on higher-quality goods, reminiscent of the way the Japanese moved from making televisions to producing low-end automobiles, and subsequently built high-end luxury brands.

Can Western Manufacturers Survive?

Even with those swing variables in play, at the current rate of outsourcing and offshoring Western manufacturing is arguably in danger of being marginalized. Should companies in these countries accept that manufacturing is past its prime and off-shore entirely? Or is there hope for bringing manufacturing home—or at least closer to home? We believe that the opportunity hinges on developing a capability for high-cost country sourcing (HCCS). Western manufacturers need to cease trying to compete on low cost, and build competitive advantage another way.

The five keys to developing that necessary HCCS capability are:

1. Put in place the right talent.
2. Develop more value-added services.
3. Create new technologies based on user feedback.
4. Emphasize premium quality market segments and price accordingly.
5. Focus on core competencies and offshore or divest the rest.

1. Put in Place the Right Talent

Boards must ensure that the governance structures of their companies provide a level playing field so that talented people from all parts of the globe can assume

leadership positions. Future leadership needs to include talent from both high-cost and low-cost countries—and not just Western countries—appropriate to the corporate strategy. Rising stars need to see clearly that they have an opportunity for the leadership role, even if they are not from the company's headquarters country. That was evident at one American specialty chemical company we studied that had just named a German to the top post after 125 years with an American CEO at the helm.

In selecting the CEO and other corporate leaders, board members should consider the individuals' skill set for finance and negotiation, how their language capabilities will contribute to (or hinder) the ability to achieve dramatic results with global teams, and their openness

Through a high-cost country sourcing approach, manufacturers can create a defensible position based on technological expertise.

to move to where the action is—even if that means long periods of expatriation from their home country. As one executive we interviewed said, today's CEO must be able to move, travel, and communicate, so as to talk to stakeholders worldwide.

Directors also need to ensure that the path to corporate leadership is geared to attract and retain talent from engineering and marketing as well as finance and accounting. "Get the bean counters out of the top levels of manufacturing," advises one supply chain director we spoke with. "They are the ones who are putting things overseas."

2. Develop More Value-added services

Manufacturers can achieve growth by leveraging the service-technology-premium quality cycle, which combines value-added services, technology, and a focus on premium quality. As a recent policy memo from the U.S. Department of Commerce put it: "The mutually reinforcing cycle of technical and commercial advances... bring full circle the link between the economy's services-intensity and its information-intensity, creating a huge, growing market for the most advanced information technologies that the economy's goods-producing industries can deliver."²

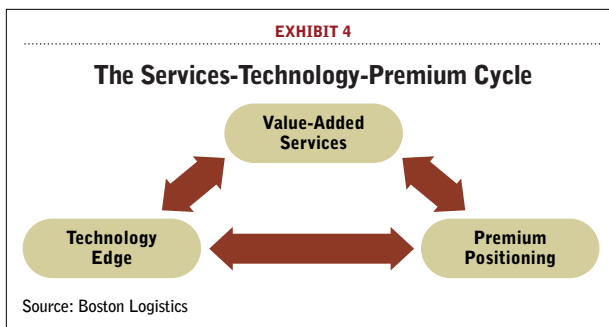
A closer look at these components shows that:

- Value-added services extend the life of manufactured products and increase the value of the product to the buyer.

- Technology, when embedded in the product design, makes the product difficult to copy or reverse engineer.

- Premium quality differentiates the product in the marketplace and pre-empts comparison with low-cost competition.

The three factors interact to combine a virtuous cycle of high margins and high growth. Value-added services provide feedback that can be used to improve the product. Technology can be used to embed advanced product design and features as well as to rapidly innovate and launch new products that help manufacturers stay a step ahead of competitors. Premium quality, which is to some degree already perceived as a result of value-added services and technology, serves as a basis for higher prices and margins. (See Exhibit 4.)



The software business exemplifies the service model in which revenue streams are based on recurring subscriptions. Subscription revenue is more stable than product revenue, and usually can be locked in for longer periods of time. In the telecommunications industry, for example, providers offer 12-month contracts. The equipment is provided at a steep discount, but the recurring revenue stream from the subscription is worth many times the cost of the hardware. “Software is a great business,” explained a private equity investor we interviewed for this research. “There are the initial development costs, which are incurred once, and multiple revenue opportunities deriving from selling the same product to different users, technology upgrades, and additional services.” An example is Monotype Imaging Inc., which owns several of the fonts used in computers, mobile devices, and television. It sells the rights for individuals and corporations to use its fonts.

Value also can be added by customization and personalization to the needs of users. These value-added services normally are related to the product, and focus on such areas as maintenance and repair, replacement parts, warranties, financing, and outsourced services.

Manufacturers should optimally make about 15 percent of their offering service-related. To determine this optimal split between manufacturing and service invest-

ments, Boston Logistics used Monte Carlo analysis. Viewing the sectors as independent investments with risk profiles (betas) of their own, we modeled the return and the risk of investing varying amounts in each sector. The analysis took into account the sales growth and the volatility of returns that were achieved in these sectors from 1986 through 2006. It also factored in the risk that could come from mergers and acquisitions as well as the risk inherent in running a particular type of company (the more capital-intensive businesses had lower organizational risk). After considering 688 different possible probabilistic outcomes, the model showed that the optimal split between products and services was 85 percent products and 15 percent services. In other words, manufacturing firms should have 15 percent services in their revenue base to provide shareholders with the same return that they can get elsewhere in the market.

3. Create New Technologies Based on User Feedback

The user feedback obtained by providers of value-added services can be used to create new technologies, or improve existing technologies. Even product updates and new features for existing products can be valuable to customers. Boston Logistics tracks several indicators of innovation for 36 categories of products. These indicators include:

- Research and development (R&D) expenditures as a percent of sales.
- Technological breakthroughs and incremental innovations.
- Customer perceptions of innovation by supplier.
- Supplier innovation from competitive forces, with a special eye on industry concentration.

Interviewees were clear that low cost was not the way to stay in business in the long run; they agreed that manufacturers need to have superior product technology. They also stressed that the executives in charge of manufacturing need to be excellent technical experts and not cost managers. “We will differentiate ourselves through technology and innovation,” said one forward-thinking manufacturer. The consensus: Innovation is a necessary response to globalization and competitive pressure.

Cisco is a leader in technology development that has put in place a repeatable method for developing and commercializing superior technology. The company operates a sort of “idea farm” whereby new ideas that gain currency within the organization bubble up organically through its information network. The company prides itself on its thought leadership. Cisco Its President and CEO John Chambers regularly presents its newly hatched ideas in prestigious venues such as the World Economic Forum in Davos, Switzerland.

4. Emphasize Premium Quality Market Segments and Price Accordingly

There will always be a low-cost option and a high-cost option. So rather than give up manufacturing altogether, Western manufacturers need to learn how to effectively execute the high-cost option. Differentiation on high quality is a sustainable business model for these companies. In the words of a Wall-Street investment banker we interviewed, “The economy will always demand manufacturers of premium/niche/high-end products which don’t compete by price but compete by quality and/or unique attributes.”

There will be a huge market at the low end, but Western manufacturers cannot afford to migrate to this end of the spectrum since their labor costs are too high to export competitively to Asia. In fact, for manufacturers that have a long history in an industry that is under competitive and trade pressure, the smartest thing may be to get out before the margins wear too thin. We saw this with one U.S.-based plastic molder that had been in business for two generations. In the face of hard-discounting competition from China, this company was forced to drastically cut its prices. It was eventually sold to a larger competitor, who then had the same problem and was forced to shut down.

Quality is more important to Western manufacturers than low cost. “Cost is always a driver, but not the main one,” explains an economics professor we surveyed. Practitioners to a large extent agree. While 60 percent of these respondents surveyed said that low cost is “quite important” or “very important,” approximately 40 percent said that cost is not driving their business model (of those, the largest share said that cost is “somewhat important”). Costs certainly will always be a major consideration in business decisions, but when it comes to determining what and where to outsource, companies need to balance cost reduction with operational excellence to come up with the right decision. Low-cost countries often have trouble achieving the quality levels accepted as the standard in Western industrialized nations. Reflective of this, 80 percent of manufacturers have increased quality control on goods made off-shore, according to a study by the American Chamber of Commerce.

The market will bear higher prices. The feedback loop between value-added services and technology innovation generates products and services that are more customized to the user, thereby creating the perception, of and that are therefore perceived as, higher-quality. But this needs to be reflected in higher prices in order to capture the higher margin and profit benefits that come with the service-technology-premium strategy. In the words of one

management consultant we interviewed: “Premium is the natural way of things. My view is that manufacturers should figure out how to differentiate their product so as to be successful in the global market, no matter where they are located. If not, they will be doomed both domestic and overseas.” Survey respondents agreed. One quarter of them (24 percent) said that their businesses will become more focused on the premium segment, compared to 18 percent who said it will become more commodity-driven. “Western countries will have greater scientific and technological development,” said an executive from a Brazilian manufacturer. “The less developed will focus on manufacturing and on growing their industry.”

One reason why a premium approach works is that manufacturers don’t have to give up the intellectual property to offshore suppliers who could wind up becoming

When it comes to the low value-added repetitive work, manufactures would be well advised to offshore it or divest it.

their competitors. For example, a European electrical conglomerate we interviewed outsources the lower end of its product range to China, but keeps total control over its top-secret intellectual property by manufacturing the strategic products in the West.

5. Focus on Core Competencies and Offshore or Divest the Rest

Managers are responsible for developing the organizational skills and resources needed to quickly adapt to the new realities, overcome the imminent challenges, and ultimately prosper in the long run. Toward this end, we recommend the following action steps:

- Build a strong engineering organization that can differentiate the company based on high-quality products and associated services. Do not over-emphasize cost efficiency—except to the extent that it can also produce higher reliability and quality products.

- Enable employees and provide the flexibility needed to compete on customization, personalization, and value-added services. In the words of one interviewee, a primary goal must be “to establish a good, reliable information network that enables employees to do the best job possible. You can’t rely on gut, you have to know! An information network that connects everyone that you do business with—customers, suppliers, and manufacturing—is the only way you can make good decisions.”

- Hire marketing talent that can position the brand

as a premium offering to capture the pricing and margin benefit of the investments made in technology, engineering, and information.

- If the company's decision is to use offshore sources, learn the economics of low-cost country sourcing first-hand by having key managers serving in an expatriate role for at least a year. This will provide a grounding in not only the business models and production norms of the low-cost country, but also the underlying social and cultural values that affect the pace of change within the enterprise, in sectors, and in the economy as a whole.

Moving up the Value Chain

The offshoring phenomenon has deep roots and long-term implications. While the trend toward low-cost country sourcing seems to be decelerating, manufacturing infrastructure, organization, and strategies of Western companies continue to be profoundly impacted by this phenomenon. In many cases, this trend has resulted in improved productivity and competitiveness for Western manufacturers—and a stronger basis for sustaining profitability in the long term. But in other cases, the LCCS approach has maxed out its potential, opening the door for what we have termed high-cost country sourcing.

Manufacturers will need to make several changes, if they haven't already, to ensure that they occupy a sustainable position in tomorrow's global and competitive environment. High-cost country sourcing offers an opportunity to do that. Through a HCCS approach, they can create a defensible position based on technological expertise. They must layer value-added services on top of manufactured products, since these "product-services" increase customer loyalty and profitability. Further, they will need to tap the innovation capabilities of the enterprise, which cannot be commoditized.

Finally, as part of a comprehensive high-cost country sourcing approach, Western manufacturers must develop a special competency and brand as high-quality producers. As for the low value-added, repetitive work: offshore it or divest it—and the sooner the better. ☺☺

References

- 1 "The Facts about Modern Manufacturing," 7th Edition. The Manufacturing Institute
- 2 Cleveland, Douglas, "The Role of Services in the Modern US Economy," US Department of Commerce International Trade Administration memo, January 1999.